

9) (a) I/O interface provides a method for transferring information b/w internal storage and external I/O devices. peripherals connected to a computer need special communication links for interchanging them with central processing unit.

(b) \Rightarrow The CPU responds to an interrupt request by enabling the interrupt acknowledge line. This signal is received by device 1 at its priority input. Then afterwards the signal passes on to next device through priority output only if device 1 is not requesting an interrupt.

(c) \Rightarrow Burst Mode of DMA

It is the DMA data transfer technique in which no of data words are transferred continuously until whole data is not transferred.

\Rightarrow Data is transferred continuously until ~~it~~ it is completed.

\Rightarrow Very fast

\Rightarrow Less utilization of CPU

\Rightarrow CPU idleness check is not required

Cycle stealing Mode of DMA

\Rightarrow It is data transfer technique in which one data word is transferred and then control is returned to CPU.

\Rightarrow Data is transferred when CPU is at idle state.

\Rightarrow Slower Speed

\Rightarrow High utilization of CPU

\Rightarrow CPU idleness check is required.